Problem Set 6

6SSMN961: APPLIED ECONOMETRICS

1. Use the data provided to estimate the DD model. What type of standard errors are you using and why? Interpret the DD coefficient.

The estimated DD model is in the Stata output. The DD coefficient is equal to -0.2065 (𝛿 = -0.2065). To interpret this coefficient, we should consider that we are using a Log-Level regression therefore the coefficient should be interpreted as:

1. Under what assumption can you interpret the DD estimate from part 1 as the causal effect of the increase in tuition fees on university applications? Use the data to construct a graph that provides a visual check of this identification assumption. What do you conclude from this graph?
2. Repeat the analysis in part 1 but extend the model to include a country-specific linear trend. How do your results change?
3. To check whether the effect of the increase in tuition fees on applications is different for STEM subjects (science, technology, engineering and mathematics) and non-STEM subjects, the model is modified. What do you conclude about the effect of the increase in tuition fees on applications for different types of subjects?

5. To check whether the increase in tuition fees affects applications differently depending on the expected salary after graduation, the model is modified. Interpret the estimates 𝛿1,𝛿2,𝛿3 and 𝛿4. Does the effect of the increase in tuition fees on applications depend on the expected salary after graduation?